

STATE OF NEW YORK
DEPARTMENT OF CONSERVATION
WATER POWER AND CONTROL COMMISSION

THE WATER TABLE IN THE
WESTERN AND CENTRAL PARTS OF
LONG ISLAND, NEW YORK

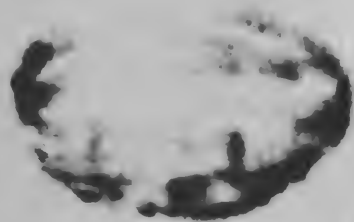
By
C. E. JACOB

Prepared in Cooperation with the Geological Survey
United States Department of the Interior



BULLETIN GW-12

ALBANY
1945



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NEW YORK STATE
WATER POWER AND CONTROL COMMISSION

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THE WATER TABLE IN THE WESTERN AND CENTRAL PARTS OF LONG ISLAND, NEW YORK

By C.E. Jacob

INTRODUCTION

Since January 1932, the Geological Survey, United States Department of the Interior, has cooperated with the New York State Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and more recently also with the Suffolk County Water Authority, in an intensive study of the ground-water resources of Long Island. This work is under the general direction of O. E. Meinzer, Geologist in Charge of the Division of Ground Water, of the Water Resources Branch of the Survey, and under the immediate supervision of M. L. Brashears, Jr., Geologist in Charge of ground-water investigations in New York and New England.

The continuing program has included the systematic measurement of water levels in shallow observation wells on the island. The purpose of these measurements has been in part to map the ground-water table and to evaluate its fluctuations, whether natural ones resulting from variations in rates of precipitation, evaporation, and transpiration, or artificial ones resulting from pumping for municipal, industrial, agricultural, or other useful purposes. The contour map of the water table presented in this report represents in a sense the culmination of an effort to expand a growing network of observation wells to cover most of Long Island. In another sense, however, it will merely serve as a guide, along with earlier contour maps, pointing to a more complete and accurate map that may be obtained by adequate coverage of the entire island by shallow test wells, and particularly of the critical area in Brooklyn and western Queens.

The present map has been made possible by the cooperative effort of many persons. Mr. W. Fred Welsh, Senior Engineer of the Nassau County Department of Public

Works, willingly made available members of the staff who assisted the Geological Survey in making the water-level measurements in May 1943. Mr. Henry L. Frauenthal, of the same organization, offered many helpful suggestions. Grateful acknowledgment is also due Mr. Russell Suter, Executive Engineer of the New York State Water Power and Control Commission, whose constructive criticism led to notable improvements in the map. The coverage of western Suffolk County was made possible by the financial cooperation of the Board of Supervisors and the Water Authority of that county. The drafting of the map and sections was executed by Mr. Lauren R. Wistoft, of the Geological Survey.

GEOLOGY

The geology of Long Island has been discussed at length by several writers (6) (10) (12) (13) and will therefore only be sketched briefly here.

Long Island is formed of glacial deposits of varying thickness that were laid down on unconsolidated beds of Cretaceous age. The backbone of the island is a double row of hills representing terminal moraines fashioned by the great ice sheets of the Pleistocene epoch. South of these morainal deposits is an outwash plain that slopes gently toward the ocean. The outwash material is quite permeable and rather uniform in structure. The water table in the area south of the moraines is accordingly a more or less continuous surface of low slope, though modified somewhat by the streams that it feeds.

Along the north shore of the island the glacial deposits are much less homogeneous and generally less permeable, being composed in part of till. Numerous bays cut into the shore of the island along the sound. Flowing into these bays are many small streams of steep slope, some of which are fed by natural springs. In the area north of the moraines there are several small lakes and water tables perched on impermeable lenses above the main water table. There the main water table slopes steeply and in irregular fashion, generally toward the north shore.

The upper Cretaceous beds that underlie the glacial deposits on most of Long Island and crop out in some places are also of importance because of their influence on the configuration of the main water table. The uppermost beds of that series, which are supposedly of Magothy age, comprise interbedded sands and silts totalling several hundred feet in thickness. Underlying these sands and silts are clays assigned to the Raritan formation, which in turn are underlain by Lloyd sand, also considered to belong to the Raritan formation. The Lloyd sand, an excellent water-bearing bed, rests unconformably on the ancient crystalline rocks, and dips toward the southeast about 100 feet to the mile. The sands of the Magothy formation, as well as the Lloyd sand, all have the main water table on Long Island as the source of their head. These sands unquestionably affect the shape of the main water table.

In many areas over the island it is difficult to establish the bottom of the main water-table aquifer.

EARLY GROUND-WATER RECORDS

In 1851 water-level measurements were made in about 30 shallow wells in the southern parts of Kings and Queens Counties. These were reported by McAlpine (1) in 1852. However, neither the exact locations of the wells nor the dates of measurements are given.

The earliest known contour map of the water table of any part of Long Island appeared in 1867 in a report by Kirkwood (2). It covered the area lying between Jamaica and Hempstead and extending about 8 miles inland from the south shore. The measurements upon which this map was based presumably were made in the late fall of 1859 or the early spring of 1860 (3). In 1854 Stoddard (4) reported elevations of the water table at several wells in Brooklyn in connection with a study of possibilities of water supply from underground sources in that area.

MAP OF 1903 BY BURR-HERING-FREEMAN COMMISSION

In November 1903 the Commission on Additional Water Supply for the City of New York reported its findings to the Commissioner of Water Supply, Gas and Electricity (5). This Commission came to be known as the Burr-Hering-Freeman Commission, for those were the names of its members. Their report included a contour map (Plate VIII of Appendix VII, following p. 810) of the water table as of July 1, 1903, based on water-level readings in 1,578 shallow wells, 535 of which were 2-inch test wells driven especially for that purpose. The map covered that part of Long Island lying west of Manor and Moriches, Suffolk County, except the area within the Borough of Brooklyn of the City of New York. By means of a five-foot contour interval it showed a water table conforming to the general outline of the island and modified by the numerous bays and streams. The maximum slopes of the water table on the south shore, as measured on ten north-south sections across the island ((5), Plate VII of Appendix VII, following p. 810), ranged from 7 to 20 feet per mile and averaged about 14 feet per mile. Slopes on the north shore were reported as ranging from 30 to 100 feet per mile, though they were not so well defined because of the variable composition and structure of the morainal material there in contrast to the more nearly uniform deposits that underlie the outwash plains to the south.

The datum of the Brooklyn Water Department was used in the Burr-Hering-Freeman investigation. It was found to be 1,087 feet above the Willets Point datum, the latter having been fixed by tide observations at Willets Point from 1891 to 1895.

The highest water-table elevation, slightly over 100 feet above sea level, was shown near the Nassau-Suffolk County line between Hicksville and Huntington. However, the contours there were drawn as a succession of short dashes, indicating that some uncertainty was attached to their value or meaning in that area.

On page 811 of the Burr-Hering-Freeman report the following statement is made:

"Where these contours are shown as a succession of long dashes, the surface of the ground water is well established; where shown as dotted lines, as on some of the areas covered by the moraine and the thick layers of till on the northerly portion of the island, the location of the surface of the water table is somewhat conjectural, because few existing wells were found there of sufficient depth to reach the true water table and the cost of the necessary wells, some of which would have had to be fully 150 feet in depth, was prohibitive. The surface of the ground water, which is held by the fine compact material forming the moraines and the layers of till that partially cover the northerly portion of the island, are not shown on this 1903 contour map. Since, in general, it appears that the water from these elevated strata is slowly percolating into the sands and gravels that, as the geologists have shown, underlie the mantle of till, to what might be termed the lower water table, which is the surface shown by the contours. . . The strata between these two saturated layers are, in some localities, completely saturated, the difference between the elevations of the two water tables representing the loss of head through vertical seepage; but in many localities the intervening sands were found to be only partially saturated."

In recent years wells of the requisite depth have been drilled in some of the doubtful areas shown on the 1903 map. The results are given on the contour map accompanying this report (Plate 1). Some of these wells struck water at two levels before the main water table was reached, confirming the observation made in 1903.

The 1903 water-table map of the Burr-Hering-Freeman Commission was republished

with slight modifications by the Geological Survey in 1906 in a report on the ground-water resources of Long Island (6). The location of contours in doubtful areas was again shown by dotted lines.

The western part of the 1903 water-table map, covering Queens and Nassau Counties only, was reproduced in 1912 by the Board of Water Supply of the City of New York in their report on obtaining an additional supply of water for the City of New York from Suffolk County (7).

An extension of the 1903 water-table contours into Brooklyn was made by Wiggin in 1934 in an engineering report on behalf of the New York Water Service Corporation, objectors to the application of the City of New York to the Water Power and Control Commission for additional ground-water supply in Brooklyn, Queens, and Nassau (8). Those contours, which had been terminated at the Brooklyn-Queens boundary, were extended into Brooklyn on the basis of water levels reported by Stoddard (4) in 1854, trunk-sewer invert elevations, and water levels from records of test borings for subway construction. The highest elevation of the water table shown in Brooklyn for 1903 was about 20 feet. Wiggin remarked, "it is probable that a few isolated areas in the high parts of Prospect Park and elsewhere had higher levels. . ." The Burr-Hering-Freeman contours of 1903 were again published in 1937, by the Water Power and Control Commission (11), together with Wiggin's extension of those contours into Brooklyn (8). Comparison was made with water-table contours for 1936.

MAP OF 1908 BY BOARD OF WATER SUPPLY, CITY OF NEW YORK

The report of the Board of Water Supply (7) referred to previously is appropriately called the Spear report after Walter E. Spear, at that time Division Engineer of the Board of Water Supply. Under his direction an intensive investigation was made of the ground-water resources of western Suffolk County. The study of ground-water levels was extended eastward to the longitude of Riverhead.

The Spear report contained a map (Vol. 1, sheet 6, opposite p. 108) showing the configuration of the water table on July 1, 1907, in that part of Suffolk County lying west of Riverhead, in addition to the above mentioned water-table map of Queens and Nassau for 1903 (Vol. 1, sheet 1, opposite p. 60) republished from the Burr-Hering-Freeman report. The contour interval was five feet. All elevations were referred to a new datum 1.72 feet below the datum of the Brooklyn Water Department.

General agreement was shown between the Spear map of 1907 of western Suffolk County and the Burr-Hering-Freeman map of 1903 covering the same area. Many of the wells put down during the 1903 investigation were later used by the Board of Water Supply. In addition, about 300 two-inch test wells were driven in the area to augment those wells and other existing wells available for observation.

Caution in the interpretation of the water-table contours in certain areas was again urged in the Spear report, as the following quotations from pages 108 and 109 will show:

"The ground-water contours shown here define, however, only the main surface of saturation. In the moraines, local beds of clay and boulder till maintain elevated water-tables that are much higher and quite independent of the main surface of saturation. Between these elevated or "perched" water-tables and the main water-table below, the strata are only partially saturated. . . .

"There are but few observations upon the surface of the main water-table beneath the high and compact morainal ridges, and the ground-water contours there are drawn in a general way from the observations in wells outside of these areas. This lack of information in these areas does not appreciably affect the accuracy

of the determination of the ground-water catchment. The few wells in the doubtful area between the Nassau County line and Elwood indicate that the ground-water summit is not far from the surface divide of the southerly moraine." (Underscoring is ours.)

MAP OF 1933 BY WIGGIN

A contour map of the water table in Brooklyn and Queens in May 1933 was presented by Wiggin in connection with hearings before the Water Power and Control Commission on the application by the City of New York already referred to. This was a joint effort by consulting engineers for the objecting water-supply companies and officials of the New York Department of Water Supply, Gas and Electricity. By comparing this map with the 1903 contours and their extension into Brooklyn, Wiggin estimated the amount of water that had been withdrawn from storage in that critical area during the intervening 30 years. Wiggin's map of 1933 was published by Laase (9) in 1934 and by Thompson, Wells, and Blank (10) in 1937.

MAP OF 1936 BY NEW YORK STATE WATER POWER AND CONTROL COMMISSION

In Bulletin GW-2 of this series (11), published by the Water Power and Control Commission in 1937, Suter gave a water-table map for 1936 with a five-foot contour interval, covering again the area from Riverhead westward. To obtain the data numerous wells were measured, some of them after relatively short periods of recovery. In many cases it was necessary to estimate elevations from topographic maps ((11), p. 51), but despite this lack of refinement the 1936 contour map was of value in indicating important changes, even in the short period from 1933 to 1936, particularly in the critical area of Brooklyn.

In commenting on the state of knowledge at the time of the hearings on the application of the City of New York in 1933 Suter stated (pp. 48, 50) "All along

the Queens-Nassau County line this Brooklyn overdraft had lowered the ground-water level by many feet. How far into Nassau County that effect went and whether it extended to Suffolk was not then (1933) known." One object of the studies made in 1936 was to fill in this gap, but again perched water-table conditions presented a serious handicap. With the funds available and with the time allotted it was not then possible to drill the necessary deep test holes to determine the true position of the main water table in the center of the island. Suter repeated the warnings given in both the Burr-Hering-Freeman and Spear reports, in the following words: "There is ever present danger that in hills, along the moraines and in disturbed strata generally levels may be taken in wells piercing perched water deposits and so fail to indicate the true upper surface of the main body of ground water." ((11), p. 51). This reservation tempered his summation (p. 50) of the results of the investigation just then completed: "Latest information showed material changes for the worse in the period 1933-1936. Not only has the Brooklyn depression gone down - - as was expected - - but the depressed area has extended far to the east into Queens County. The effects in Nassau County are serious and there can be no doubt but that they extend even into Suffolk, although somewhat masked by the difficulty of avoiding perched water tables in the ranges of hills near the county line." (Underscoring is ours.)

Deep observation wells drilled more recently in that area passed through the perched water tables and reached the main water table. As discussed more fully below, it now appears that the effect of pumping in Brooklyn has not extended to Suffolk County. The apparent decline of the water table at the Nassau-Suffolk County line is attributable first to the fact that the early maps contoured perched water tables, and secondly, to differences in antecedant precipitation.

MAP OF 1943 BY GEOLOGICAL SURVEY

Plate 1 is a map of the western and central parts of Long Island showing by contours the configuration of the main water table in May 1943. The contours are drawn with a 10-foot interval on the basis of water-level measurements in 289 shallow wells distributed among the counties as follows:

<u>Agency, or Owner</u>	<u>County</u>			
	<u>Kings</u>	<u>Queens</u>	<u>Nassau</u>	<u>Suffolk</u>
Nassau Co. Dept. of Public Works	0	0	167	0
New York City Board of Water Supply	0	0	0	28
New York City Dept. of Water Supply	12	25	6	8
New York Water Service Corporation	7	0	0	0
U. S. Geological Survey	0	0	1	20
Industrial or other	9	0	1	5
Totals	28	25	175	61

The table beginning on page 17 gives pertinent data concerning these wells. The State well numbers are those adopted by the New York State Water Power and Control Commission (14) and widely used by other agencies. The same numbers are used in the series of Water-Supply Papers (15) in which complete water-level records for most of the 289 wells are published, most of them going back to the beginning of record. The owner's number is given in many cases to assist in referring to the early records.

Under "Location" are given addresses or nearest street intersections, though in many cases merely the localities are given. The depth of the well means the total depth measured inside the casing from the top. The top of the casing is generally within about a foot of the ground surface, except as noted under

"Remarks."

The tabulated water-level elevations are based mostly on measurements made near the end of May 1943. The more recently completed wells in Suffolk County were measured in June 1944. At the end of that month the water table over most of Long Island, as shown in other representative shallow wells, was generally at about the same level as it was at the end of May 1943.

Water levels in supply wells of the New York Water Service Corporation in Flatbush, Brooklyn, were taken from testimony of Thomas H. Wiggin, Consulting Engineer, given at a hearing before the Water Power and Control Commission. In some cases these are static levels of wells in service.

All elevations given in the table refer to mean sea level. The elevations of measuring points on the well casings have been determined by differential leveling done by the Geological Survey. The general order of significance of the water-table elevations is indicated on the map, most of the elevations being given to the nearest tenth of a foot. Water levels determined at another time than at the end of May 1943 are given to the nearest foot only.

Where the density of wells is adequate the contours are drawn as full lines. Where information is lacking or where there is some uncertainty as to its interpretation, the contours are drawn as broken lines. No attempt has been made to draw in the contours below the 60-foot contour in northern Nassau County because many of the wells in that area undoubtedly reach only to perched water tables. That is true, for example, of wells N 1171 and N 1172.

There is a large area in northwestern Suffolk County in which there are few shallow observation wells. The provisional dashed contours there should be regarded only as suggestive of the general shape of the main water table in that area. Farther to the east, between Lake Ronkonkoma and Carman's River, the coverage is better, particularly along two recently completed profiles

(sections H-H' and I-I').

In drawing contours along the south shore of Suffolk County the 1908 map by the Board of Water Supply was used as a guide, allowance being made for the general decline of water levels that is known to have occurred since that time (16). Also allowance was made for the difference in datum planes.

No contours are shown for that area in Queens County lying north of the terminal moraine, except for the zero contour. This contour encircles the center of heavy pumpage in the Woodhaven area and separates the high area of north Queens from the low area in Brooklyn. At two "stagnation points" it intersects the closed zero contour that completely encircles the island along its shore. One of these points is on Jamaica Bay and the other assumedly on Newtown Creek. A similar zero contour separates the high area of Gravesend from the rest of Brooklyn.

Perhaps the most striking difference between the map on plate 1 and earlier water-table contour maps of Long Island is the configuration of the high in Nassau County. The maximum elevation of the main ground-water table in Nassau County in May 1943 was about 85 feet, or approximately 15 feet lower than shown on the 1903 contour map. Furthermore, the high point in 1943 was about 5 miles west of its position according to the 1903 map. However, it must be kept in mind that on the 1903 map the contours in that area were drawn as dotted lines, indicating that the position of the true water table was conjectural, as pointed out above (p. 10). Comparison of the two water tables is best seen on section G-G', plate 2. Section F-F' shows the same divergence of levels, though to a lesser degree.

Differences in average elevation of the water table in 1903 and 1943 as shown on the other sections of plate 2 is attributable partly to differences in precipitation. A recent study (16) of early water levels and precipitation and

their long-term correlation shows that in 1890 or about that year the water table was at its highest stage since 1850. A secondary high was reached in 1903. On the basis of precipitation data it is estimated that in Nassau and western Suffolk Counties the water table should have averaged about four or five feet lower in 1943 than in 1903. The profiles of plate 2 show approximately that much difference in the stage of the water table at the beginning and end of this 40-year period.

Another significant difference between the present contour map and earlier maps is in the shape and extent of the water-table depression in Brooklyn and western Queens. The probable original shape of the water table in Brooklyn is indicated on section A-A' on plate 2, which is based on Wiggin's extension of the 1903 contours (8). The decline that has occurred there is the result of pumping for industrial purposes and for public water supplies (17). In the early years of the ground-water development in Brooklyn the decline was gradual. In recent years it has been accelerated and the water-table depression has expanded. A comparison of the 1953 and 1936 contour maps shows that the water table in parts of Brooklyn and Queens declined rather sharply during that three-year period. Since 1936 there has been only a small net decline, although the depression has continued to expand. In general, low water levels were reached about 1941. Since then there has been a slight recovery of water levels in the area of most concentrated pumping.

Referring to section B-B' on plate 2, it is seen that in 1943 the water table was lower everywhere along that section than it was in 1903. Part of that difference in levels is due to the difference in average rates of precipitation before 1903 and before 1943, which was discussed above. However, the major part of the difference in water levels there is due to the pumping distributed over the area adjacent to that section ((17), fig. 6).

In view of the relative nearness of the center of heavy pumping in Brooklyn

to the East River, it is not likely that the effect of that pumping reaches very far into Queens. As the water table hinges on the tidewater in the nearby channels, any transient state of flow set up by a change in the rate of pumping in that area soon degenerates into a new steady state of flow without affecting appreciably the water levels at comparably greater distances in the opposite direction.

Notwithstanding the evident overdraft in Brooklyn and in parts of Queens, the ground-water resources of Long Island as a whole are still not fully utilized. The potential supply in the central and eastern parts of the island is tremendous. (11), p. 32). Through proper development it may be used for municipal, industrial and agricultural purposes on a scale that has scarcely been anticipated.

REFERENCES

- (1) McAlpine, W. J., Report made to the water committee of the Common Council of the City of Brooklyn on supplying the city with water, p. 113, Brooklyn, I. Van Anden, 1852.
- (2) Kirkwood, J. P., The Brooklyn waterworks and sewers, a descriptive memoir, New York Board of Water Commissioners, 1867.
- (3) Leggette, R. M., Long-time records of ground-water levels on Long Island, New York, Trans. Amer. Geophys. Union, p. 341, 1936. Also Thompson, D. G., U. S. Geological Survey Water-Supply paper 777, footnote p. 115, 1936.
- (4) Stoddard, J. S., Report on the subject of supplying Brooklyn with water by the well system; Documents and plans submitted by the Water Committee to the Common Council of the City of Brooklyn, pp. 87-99, 1854.
- (5) Report of the Commission on Additional Water Supply for the City of New York, Martin B. Brown Co., New York 1904.
- (6) Veatch, A. C., and others, Underground water resources of Long Island, New York, U. S. Geological Survey Professional Paper 44, Plate XII, 1906.
- (7) Report of the Board of Water Supply of the City of New York on Long Island Sources, Walter E. Spear, Division Engineer, 2 vols., 1912.
- (8) Engineering Report of Thomas H. Wiggin in the matter of Application Number 681 of the City of New York to the Water Power and Control Commission, February 26, 1934.
- (9) Laase, W. F., Sub-surface water supply of western Long Island and its utilization, Municipal Eng. Jour., map p. 24, 1934.
- (10) Thompson, David G., Wells, Francis G., and Blank, Horace R., Recent geologic studies on Long Island with respect to ground-water supplies. Econ. Geology, V. 32, pp. 451-470, 1937.
- (11) Suter, Russell, Engineering Report on the water supplies of Long Island, State of New York Water Power and Control Commission, Bulletin GW-2, 1937.
- (12) Fuller, M. L., The geology of Long Island, N. Y., U. S. Geological Survey Professional Paper 82, 1914.
- (13) Crosby, W. O., Outline of the geology of Long Island in its relation to the public water supplies, in Freeman, J. R., Report upon New York's water supply, appendix 16, pp. 553-572, Martin B. Brown Co., 1900.
- (14) Leggette, R. M., Records of wells in Kings County, New York, New York State Water Power and Control Commission, Bulletin GW-3, Albany, 1937. Same for Suffolk, Nassau, and Queens Counties, Bulletins GW-4, 5, and 6 respectively, published in 1938, all by R. M. Leggette.

- (15) Water levels and artesian pressure in observation wells in the United States, U. S. Geological Survey Water-Supply Papers 777, 817, 840, 845, 886, 906, 936, 944, and 986 (in press), covering consecutive years from 1935 to 1943, sections on Long Island by M. L. Brashears, Jr., R. M. Leggette, E. J. Schaefer, and D. G. Thompson.
- (16) Jacob, C. E., Correlation of ground-water levels and precipitation on Long Island, New York, Part II, Correlation of data, Trans. Amer. Geophys. Union, 1944, (in press.)
- (17) Thompson, David G., and R. M. Leggette, Withdrawal of ground water on Long Island, N. Y., New York State Water Power and Control Commission, Bulletin GW-1, 1936.

Well Number State	Owner's	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
K 80		C. J. Tagliabue Co.	Park and Fortrand Avenues, Brooklyn	6	50	12.00	-27.8	May 29, 1948	Well in basement; top of casing about 6 ft. below street.
K 85	2	A. Lambig Co.	128 Middleton St., Brooklyn	6	59.1	12.84	-25.6	do	Well in pit; top of casing 4.5 ft. below ground surface.
K 87		Y. M. C. A.	179 Marcy Ave., Brooklyn	6	80.7	7.85	-19.2	do	Well in pit in basement; top of casing 89.8 ft. below street.
K 92		St. John's Univ.	75 Lewis Ave., Brooklyn	6	98.6	64.4	-21.6	do	Well in pit in basement; top of casing 71.5 ft. below street.
K 97		The Burden Co.	82 Lexington Ave., Brooklyn	6	120	82.25	-24.8	Apr. 5, 1944	Well in building; top of casing about 2 ft. below street.
K 104		do	798 Fulton St., Brooklyn	10	88.5	8.52	-25.4	May 29, 1948	Well in pit in basement; top of casing about 72 ft. below street.
K 196	1	Endak. Ice Co.	12th Ave. and 87th St. Brooklyn	10	137.8	79.68	-8.1	do	Well in building; top of casing about 7 ft. above street.
K 501	F 1	H. I. W. S. C.	868 DeHill Road, Brooklyn	24	102.5	46.65	-4.9	June 1948	Water level reported by Thos. H. Wiggins.
K 502	F 2	do	E. 81st St. near Newdick Ave., Brooklyn	26	101	10.90	-9.2	Mar. 27, 1948	Top of wall about 4.8 ft. below ground surface.
K 504	F 4	do	Albany Ave. and Foster Ave., Brooklyn	24	108.5	19.81	-9.8	June 1948	Water level reported by Thos. H. Wiggins.
K 506	F 6	do	807 Caten Ave., Brooklyn	24	120	49.92	-15.5	do	do
K 515	F 15	do	868 McDonald Ave., Brooklyn	26	92.4	53.02	-2.6	do	do
K 515	F 14	do	1287 Union Ave., Brooklyn	26	90	25.82	-10.0	do	do
K 535		do	E. 98th St. near Rutland Road, Brooklyn	6	295	42.68	-22.4	May 29, 1948	Well in trench; top of casing about 5 ft. below ground surface.
K 535	Grave-1	H. I. C. D. W. S.	Ave. 8 and E. 16th St., Brooklyn	6	85.5	14.09	-2.4	May 1, 1948	Well in basement; top of casing 10.8 ft. below ground.
K 539		do	Atlantic Ave. and Logan St., Brooklyn	4 1/2	82.7	22.62	-5.4	May 29, 1948	Well in building; top of casing about 2 ft. above street.
K 921		Byram Corp.	Grand and St. Marks Aves., Brooklyn	10	264	117.88	-25.8	do	do
K 1198		H. I. C. D. W. S.	Cleveland and Fulton Sts., Brooklyn	1 1/2	53.4	56.90	-5.5	do	do
K 1199		do	Jefferson and Howard Aves., Brooklyn	1 1/2	75.6	49.82	-16.0	do	do
K 1255		do	Fulton St. and Pennsylvania Ave., Brooklyn	1 1/2	79.4	60.47	-9.1	do	do
K 1256		do	Lexington and Patchen Aves., Brooklyn	1 1/2	81.7	50.91	-17.8	do	do
K 1257		do	Dalmonise Pl. and Hopkins St., Brooklyn	1 1/2	85.2	18.02	-24.0	do	do
K 1263		do	E. 16th St. and Cortelyou Rd., Brooklyn	1 1/2	49.7	55.87	-10.4	do	do
K 1264		do	E. 57th St. and Snyder Ave., Brooklyn	1 1/2	66.6	45.89	-14.4	do	do
K 1265		do	Tharford St. and Riverdale Ave., Brooklyn	1 1/2	45.8	25.22	-10.6	do	do
K 1266		do	Vernant St. and Livonia Ave., Brooklyn	1 1/2	41.4	27.66	-5.9	do	do
K 1266		do	Elake Ave. and Crystal St., Brooklyn	2	35.9	6.50	-1.4	do	do
K 1247		Albee Theatre	DeKalb Ave. and Fulton St., Brooklyn	4 1/2	57.6	26.26	-20.4	do	Well in basement; top of casing about 14 ft. below street.
N 1187		J. N. Hill	Cedar Swamp Road, Wheatley Hills	6	800	218.68	85.0	do	do
N 1101	D 1	N. C. D. P. W.	Valley Rd., near Willets Rd., Manhasset	1 1/2	86.8	49.88	44.1	May 28, 1948	do
N 1102	D 2	do	Willets and Valley Rds., Lake Success	2 1/2	140.0	185.82	54.8	do	do
N 1103	D 3	do	Marous Ave. and Lakeville Rd., Lake Success	2	180.6	146.12	55.6	do	do
N 1104	D 4	do	80th Ave. near Rhodes St., New Hyde Park	2	76.6	125.87	56.7	do	do
N 1105	D 5	do	Emerson and Whittier Aves., New Hyde Park	2	61.4	108.20	54.4	do	do
N 1107	D 7	do	Kingston Ave. and Bertha St., So. Floral Park	1 1/2	57.2	66.41	44.2	do	do
N 1108	D 8	do	Jacob St. and Rosalind Ave., Elmont	1 1/2	47.1	70.12	59.6	do	do
N 1109	D 9	do	Dutch Broadway and Henry St., Elmont	1 1/2	57.5	42.54	27.4	do	do
N 1110	D 10	do	Henry Street, No. Valley Stream	1 1/2	27.5	50.86	20.5	do	do

Well Number State	Owner	Location	Diameter (inches)	Depth (feet)	Elevation at top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
N 1111	D 11	Fletcher and Tenneyk Aves., Valley Stream	1 1/2	27.3	20.44	14.2	May 28, 1945	
N 1112	D 12	Sunrise Highway and 2nd St., Valley Stream	1 1/2	22.2	15.44	9.4	May 29, 1945	
N 1113	D 13	DuBois Ave. and Drew St., Gibson	1 1/2	22.2	10.46	6.1	May 28, 1945	
N 1114	D 14	W. Broadway and Hamilton Ave., Hewlett	1 1/2	31.4	24.00	10.2	do	
N 1115	D 15	Wood St. and Brower Ave., Woodhull	1 1/2	19.7	22.88	10.9	do	
N 1117	E 1	On Fraser property, Sands Point	1 1/2	38.3	18.31	4.7	do	
N 1118	E 2	Harbor Acres, Port Washington	2 1/2	131.2	152.06	90.4	do	
N 1119	E 3	Port Washington	2 1/2	145.0	154.20	118.0	do	
N 1120	E 4	Flower Hill	2 1/2	94.7	117.37	87.8	do	
N 1121	E 5	Strathmore Village	2 1/2	177.9	220.05	61.4	do	
N 1122	E 6	North Hills	4	189.0	178.89	65.1	do	
N 1123	E 7	Herricks	2 1/2	95.9	144.55	66.1	do	
N 1124	E 8	Garden City Park	1 1/2	59.9	109.93	64.8	do	
N 1125	E 9	Garden City Park	1 1/2	48.9	95.96	82.2	do	
N 1126	E 10	Steward Ave. and Sackville Rd., Garden City	1 1/2	49.4	86.74	57.8	May 29, 1945	
N 1127	E 11	Munson	1 1/2	36.1	75.15	52.7	May 28, 1945	
N 1128	E 12	Munson	1 1/2	36.5	65.08	42.6	do	
N 1129	E 13	Lakeview	1 1/2	36.4	50.90	31.7	do	
N 1130	E 14	Malverne	1 1/2	35.4	37.51	21.8	do	
N 1131	E 15	Malverne	1 1/2	28.5	24.41	15.4	do	
N 1132	E 16	Sunrise Hwy., and Lakewood Blvd., Lynbrook	1 1/2	27.1	20.87	8.4	May 29, 1945	
N 1133	E 17	East Rockway	1 1/2	25.4	10.08	3.4	May 28, 1945	
N 1134	F 1	Roslyn	1 1/2	35.8	39.04	21.8	May 31, 1945	
N 1135	F 2	Roslyn	2	37.5	144.27	68.2	do	
N 1136	F 3	Albertson	1 1/2	62.8	125.61	69.7	do	
N 1137	F 4	Williston Park	1 1/2	48.8	107.31	74.2	do	
N 1138	F 5	Mineola	1 1/2	48.5	104.37	72.6	do	
N 1139	F 6	Garden City	2 1/2	59.1	102.98	87.9	do	
N 1140	F 7	Kellum Pl. and 9th St., Garden City	1 1/2	42.5	91.54	61.0	do	
N 1141	F 8	Garden City	1 1/2	32.5	76.56	54.5	do	
N 1142	F 9	Hempstead	1 1/2	35.6	61.92	45.8	do	
N 1143	F 10	Hempstead	1 1/2	34.5	53.11	35.8	do	
N 1144	F 11	South Hempstead	1 1/2	31.9	46.85	35.1	do	
N 1145	F 12	Rockville Centre	1 1/2	27.6	40.18	27.7	do	
N 1146	F 13	Rockville Centre	1 1/2	32.3	37.76	24.7	do	
N 1147	F 14	Seaman Ave. near Knollwood Rd., Baldwin	1 1/2	25.4	27.32	18.1	do	
N 1148	F 15	Baldwin	1 1/2	27.3	21.21	6.7	do	
N 1149	G 1	Glen Cove	2 1/2	-	89.60	45.2	May 28, 1945	
N 1150	G 2	Glen Cove	1 1/2	20.6	53.08	37.5	do	

Well Number State	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
N 1151 O 5	H. G. D. P. W.	Glen Cove	1 1/2	26.2	84.05	25.5	May 28, 1945	
N 1152 O 4	do	do	4	180.4	154.05	51.4	do	
N 1153 O 5	do	Glen Head	2 1/2	85.5	121.86	61.5	do	
N 1154 O 6	do	Greenvale	2 1/2	141.2	178.65	64.0	do	
N 1155 O 7	do	East Hills	4	225.9	280.50	76.0	do	
N 1156 O 8	do	Old Westbury	4	108.9	158.08	76.8	do	
N 1157 O 9	do	do	1 1/2	115.9	170.25	77.7	do	
N 1158 O 10	do	do	1 1/2	51.7	111.22	77.1	do	
N 1159 O 11	do	Carle Place	1 1/2	55.4	86.14	72.4	do	
N 1160 O 12	do	Stewart Ave., Mitchell Field	1 1/2	45.5	82.57	65.8	May 29, 1945	
N 1162 O 14	do	Unidaule	1 1/2	58.5	70.50	51.7	May 28, 1945	
N 1165 O 15	do	do	1 1/2	23.7	56.22	44.9	do	
N 1164 O 16	do	Roosevelt	1 1/2	54.2	48.98	35.6	do	
N 1165 O 17	do	do	1 1/2	51.5	40.59	25.4	do	
N 1166 O 18	do	Freeport	1 1/2	27.4	29.15	18.2	do	
N 1167 O 19	do	No. Ocean and Brooklyn Avenues, Freeport	1 1/2	27.5	25.76	11.5	May 29, 1945	
N 1169 O 20	do	Freeport	1 1/2	27.9	14.01	5.0	May 28, 1945	
N 1171 H 2	do	Lattingtown	2 1/2	89.1	85.28	82.4	do	
N 1172 H 5	do	Loonet Valley	2 1/2	101.5	145.39	61.9	do	
N 1173 H 4	do	Glen Cove	2 1/2	96.9	144.40	66.6	do	
N 1174 H 5	do	Olden Valley Road, Old Brookville	2 1/2	60.1	112.92	72.6	do	
N 1175 H 6	do	Near No. Hempstead Turnpike, Old Westbury	4	159.5	178.99	79.4	do	
N 1176 H 7	do	Post Ave. and Wheatley Road, Old Westbury	4	197.6	194.61	82.1	do	
N 1177 H 8	do	Hitchcock and Powell Lanes, Old Westbury	4	146.2	182.88	83.6	do	
N 1179 H 10	do	School St. near Old Country Road, Westbury	1 1/2	57.7	104.24	75.9	do	
N 1181 H 12	do	Fulton St. near Merrick Avenue, East Meadow	1 1/2	59.0	82.85	59.5	do	
N 1182 H 15	do	Spring St. and Merrick Avenue, East Meadow	1 1/2	57.8	70.91	51.1	do	
N 1185 H 14	do	William Street, North Merrick	1 1/2	52.6	80.17	57.0	do	
N 1184 H 15	do	Header and Camp Avenues, North Merrick	1 1/2	57.6	53.17	22.5	do	
N 1185 H 16	do	N. Grand Avenue and Lindgren Street, Merrick	1 1/2	17.1	51.13	15.8	May 28, 1945	
N 1186 H 17	do	Merrick Road and Central Parkway, Merrick	1 1/2	25.1	9.90	5.4	May 28, 1945	
N 1187 O 1	do	Bayville	1 1/2	25.1	5.15	5.9	May 27, 1945	
N 1188 O 2	do	Mill Neck	1 1/2	53.6	54.80	22.8	do	
N 1189 O 3	do	do	1 1/2	53.1	66.71	61.4	do	
N 1190 O 4	do	Mattinecock	4	99.1	127.68	60.0	do	
N 1191 O 5	do	Upper Brookville	2 1/2	97.2	154.38	75.0	do	
N 1192 O 6	do	Muttintown	2 1/2	77.6	142.82	86.3	do	
N 1193 O 7	do	Brookville	2 1/2	97.2	251.05	85.5	May 27, 1945	
N 1194 O 8	do	Jericho	2 1/2	104.0	174.84	86.3	do	

Well Number State	Owner's	Owner	Location	Diameter (inches)	Depth (feet)	Elevation at top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
N 1196	O 9	N. C. D. P. W.	Hicksville	2 1/2	-	146.99	88.2	May 27, 1945	
N 1196	O 10	do	do	1 1/2	61.9	124.87	78.7	do	
N 1197	O 11	do	do	1 1/2	61.0	116.62	74.5	do	
N 1198	O 12	do	Newbridge Road, So. of Hicksville	1 1/2	51.7	100.84	66.7	do	
N 1199	O 13	do	East Meadow	1 1/2	47.5	88.95	59.8	do	
N 1200	O 14	do	North Bellmore	1 1/2	57.1	69.61	50.7	do	
N 1201	O 15	do	North Bellmore	1 1/2	51.7	55.07	42.1	do	
N 1202	O 16	do	do	1 1/2	29.4	44.62	35.4	do	
N 1203	O 17	do	Bellmore	1 1/2	25.5	27.29	25.0	do	
N 1204	O 18	do	Harris Court and John Street, Bellmore	1 1/2	28.6	21.47	11.5	do	
N 1205	O 19	do	Bellmore	1 1/2	28.5	9.25	1.8	do	
N 1206	P 1	do	Bayville	1 1/2	50.5	8.62	5.0	do	
N 1207	P 2	do	Oyster Bay	1 1/2	25.7	22.55	22.4	do	
N 1208	P 3	do	do	1 1/2	50.7	59.17	45.1	do	
N 1209	P 4	do	East Norwich	2 1/2	87.7	146.21	102.4	do	
N 1210	P 5	do	do	1 1/2	150.6	184.25	96.6	do	
N 1211	P 6	do	Syosset	2 1/2	156.0	217.25	73.4	do	
N 1212	P 7	do	Jericho Turnpike, Locust Grove	4	184.4	228.21	84.6	do	
N 1213	P 8	do	Hicksville	2 1/2	109.5	176.18	84.7	do	Recorder well.
N 1214	P 9	do	do	1 1/2	79.6	148.68	80.5	do	
N 1215	P 10	do	Elmwooddale Road and Broadway, Hicksville	1 1/2	55.6	115.47	78.2	do	
N 1216	P 11	do	Central Blvd., Central Park	1 1/2	55.8	104.45	65.7	do	
N 1217	P 12	do	Inland Trees	1 1/2	32.4	76.94	57.5	do	
N 1218	P 13	do	Jerusalem	1 1/2	41.6	76.15	51.8	do	
N 1219	P 14	do	North Wantagh	1 1/2	28.5	57.06	42.5	do	
N 1220	P 15	do	Seaford	1 1/2	22.5	44.95	30.0	do	
N 1221	P 16	do	do	1 1/2	28.5	52.18	20.6	do	
N 1222	P 17	do	Geodalia Place and John Street, Seaford	1 1/2	28.5	21.18	8.9	do	
N 1223	P 18	do	South Massapequa	1 1/2	25.5	6.09	2.8	do	
N 1224	T 1	do	Cove Neck	1 1/2	-	25.41	5.7	do	
N 1225	T 2	do	do	1 1/2	19.9	6.81	5.0	do	
N 1226	T 3	do	do	1 1/2	62.5	35.74	24.9	do	
N 1227	T 4	do	Oyster Bay Cove	2 1/2	154.1	171.46	49.9	do	
N 1228	T 5	do	Syosset	4	176.8	225.77	65.2	do	
N 1229	T 6	do	do	4	201.5	251.90	75.2	do	
N 1230	T 7	do	Plainview	2 1/2	144.5	174.98	51.8	do	
N 1231	T 8	do	do	2 1/2	86.2	145.72	79.6	May 27, 1945	
N 1232	T 9	do	Plainview Road and Plain Bay Path, Plainview	2 1/2	54.5	111.61	76.0	do	
N 1233	T 10	do	Plainview Road and Motor Parkway, Bethpage	1 1/2	55.7	95.19	69.2	do	

Well Number	State	Owner's	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
N 1234	T 11	N. C. D. P. W.	Plainsview Road, Central Park	1 1/2	65.3	101.15	82.2	May 27, 1945		
N 1235	T 12	do	Farmingdale	1 1/2	54.5	72.15	55.7	do		
N 1236	T 13	do	North of Massapequa Centre	1 1/2	44.5	70.46	45.4	do		
N 1237	T 14	do	Massapequa Centre	1 1/2	54.2	55.95	37.6	do		
N 1238	T 15	do	Massapequa	1 1/2	28.6	40.54	29.1	do		
N 1239	T 16	do	Massapequa Park	1 1/2	28.5	30.44	19.0	do		
N 1240	T 17	do	Manhattan Avenue, Massapequa Park	1 1/2	28.2	25.00	10.7	do		
N 1241	T 18	do	South of Massapequa Park	1 1/2	25.7	7.40	4.4	do		
N 1242	V 1	do	North Hempstead Turnpike, Cold Spring Harbor	1 1/2	31.1	41.08	28.6	do		
N 1243	V 2	do	Velson-Stillwell Road, Cold Spring Harbor	1 1/2	16.0	64.61	55.5	do		
N 1244	V 3	do	Jericho Turnpike and Avery Road, Syosset	4	259.0	248.89	71.7	do		
N 1245	V 4	do	Plainsview Road, Plainsview	2 1/2	202.3	259.95	76.6	do		
N 1246	V 5	do	Plainsview-Melville Road, Plainsview	4	124.7	185.10	78.1	do		
N 1247	V 6	do	Near Motor Parkway, Bethpage	1 1/2	109.5	157.15	72.1	do		
N 1249	V 8	do	Sequoia Avenue and Wall Street, Farmingdale	1 1/2	34.0	67.84	53.5	do		
N 1250	V 9	do	Old Carman Road, Farmingdale	1 1/2	53.5	62.24	46.3	do		
N 1251	V 10	do	County Line Road, Farmingdale	1 1/2	28.7	48.85	35.8	do		
N 1252	V 11	do	County Line Road and Smith Street, Amityville	1 1/2	25.5	29.51	25.5	do		
N 1253	V 12	do	Clocks Blvd. and Pine Street, Amityville	1 1/2	28.7	28.43	15.7	May 29, 1945		
N 1254	V 13	do	County Line Road and Merrick Road, Amityville	1 1/2	28.7	14.04	5.8	May 27, 1945		
N 1255	do	do	Clinton Road and St. James Street, Garden City	1 1/2	34.8	79.85	61.0	May 29, 1945		Replaced N. I. C. D. W. S. Well CH 196.
N 1256	do	do	Hillside Avenue and Bacon Road, Westbury	1 1/2	50.5	112.54	76.5	do		Replaced N. I. C. D. W. S. Well CH 201.
N 1257	do	do	Carman and Soranton Avenues, East Rockaway	1 1/2	27.9	21.94	7.9	do		Replaced N. I. C. D. W. S. Well L 44.
N 1258	M 58	N. I. C. D. W. S.	Carman Road, Farmingdale	1 1/2	20.8	48.19	37.6	do		
N 1259	do	U. S. G. S.	Hicksville-Massapequa Road, Plainville	1 1/2	47.5	73.37	52.5	do		Replaced N. I. C. D. W. S. Well M 133.
N 1260	do	N. C. D. P. W.	Main Street near Pittsburgh Avenue, Massapequa	1 1/2	29.3	55.14	21.6	May 31, 1945		Replaced N. I. C. D. W. S. Well S 45.
N 1262	S 169	N. I. C. D. W. S.	Wantagh Avenue near So. State Parkway, Wantagh	1 1/2	17.1	40.96	34.8	May 29, 1945		
N 1265	do	N. C. D. P. W.	Wantagh and Farmingdale Roads, Central Park	1 1/2	32.2	65.97	50.8	do		Replaced N. I. C. D. W. S. Well S 181
N 1264	S 186	N. I. C. D. W. S.	Newbridge Road, near Sunrise Highway, Bellmore	1 1/2	25.2	13.72	8.2	do		
N 1461	do	N. C. D. P. W.	New South Road at L. I. R. R., So. Hicksville	6	74.5	131.49	76.0	do		Recorder wall. Top of casing 2.0 feet above ground.
N 1462	do	do	Bloomingsdale Road at L. I. R. R., Island Trees	6	51.7	94.98	62.9	do		do
N 1463	do	do	Seaman's Neck Road and So. State Parkway, Jericho	6	30.6	50.67	35.7	do		do
N 1464	do	do	Grant and Franklin Avenues, Seaford	6	42.1	30.32	15.1	do		Recorder wall. Top of casing 1.5 feet above ground.
N 1614	L 161	N. I. C. D. W. S.	Herricks Road, Garden City Park	1 1/2	35.8	100.70	68 ±	-		
N 1615	CI 264	do	Merrick Avenue, East Hempstead	1 1/2	25.6	62.75	44.5	May 28, 1945		
N 1616	CI 276	do	Post Avenue and Argyle Road, Westbury	1 1/2	48.4	122.80	31.1	May 29, 1945		
N 1621	I 1	N. C. D. P. W.	Bellerose	1 1/2	60.1	85.85	59.5	May 28, 1945		
N 1622	I 2	do	Belmont Park	1 1/2	55.0	76.07	35.6	do		
N 1623	I 3	do	Kliment	1 1/2	54.6	65.56	31.7	do		

Well Number State	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
N 1824	I 4	N. C. D. P. W.	1 1/2	44.9	47.85	24.5	May 28, 1945	
N 1825	I 5	do	1 1/2	86.8	57.57	18.2	do	
N 1826	I 6	do	1 1/2	24.2	16.14	11.5	do	
N 1832		Groves and Elm Avenues, Ballerose	1 1/2	54.9	83.11	45.5	May 29, 1945	
N 1835		Stewart Avenue and 6th Street, New Hyde Park	1 1/2	45.9	83.05	55.7	May 31, 1945	
N 1834		Madison and Stewart Avenues, Garden City	1 1/2	43.0	89.55	58.5	May 29, 1945	
N 1828		Melville Road, near Suffolk Co. Line, Farmingdale	6	57.0	86.89	80.0	May 28, 1945	Recorder well replacing N 1145. Top of casing 5.0 feet above ground.
N 1829		Stewart Avenue and Kewbridge Avenue, Salisbury	6	29.2	79.17	67.7	May 29, 1945	Recorder well replacing N 1180. Top of casing 2.5 feet above ground.
N 1830		Tyson Avenue near L. I. R. R., Floral Park	6	83.1	97.32	50.7	do	Recorder well replacing N 1106. Top of casing 2.5 feet above ground.
Q 1089		N. Y. C. D. W. S.	2	82.5	20.51	1.9	do	Replaced N. Y. C. D. W. S. Well A 35.
Q 1090		Hawthorne Creek Road, near 135d Avenue, Aqueduct	1 1/2	42.2	51.62	4.2	do	Replaced N. Y. C. D. W. S. Well A 43.
Q 1225		Rockaway Blvd. and 142d Place, South Ozone Park	2	32.0	26.60	8.0	do	Replaced N. Y. C. D. W. S. Well A 55 A.
Q 1224		102d Avenue near Van Wyck Blvd., Jamaica	2	47.5	47.65	8.6	do	
Q 1225		109th Avenue and 200th Street, Hollis	2	52.0	49.40	28.4	do	
Q 1248		100th Rd. and Belt Parkway, Queens Village	1 1/2	48.9	76.53	36.5	do	
Q 1249		108th Avenue and 218th Street, Queens Village	1 1/2	49.5	72.55	32.5	do	
Q 1250		Liberty and Camden Avenues, Hollis	1 1/2	26.0	57.56	21.2	do	
Q 1251		107th Avenue and 172d Street, Jamaica	1 1/2	36.2	42.69	11.8	do	
Q 1252		Liberty Avenue and 157th Street, Jamaica	1 1/2	28.2	51.18	12.9	May 1, 1945	
Q 1253		101st Avenue and 121st Street, Richmond Hill	1 1/2	55.8	49.16	3.9	May 29, 1945	
Q 1254		101st Avenue and 108th Street, Richmond Hill	1 1/2	55.7	45.46	-0.5	do	
Q 1255		Atlantic Avenue and Woodhaven Blvd., Woodhaven	1 1/2	52.8	40.45	-5.2	do	Replaced N. Y. C. D. W. S. Well A 25 A.
Q 1256		96th Avenue and 82d Street, Woodhaven	1 1/2	37.6	25.97	-2.9	do	
Q 1257		Liberty Avenue and Woodhaven Blvd., Ozone Park	1 1/2	36.8	28.78	-1.0	do	
Q 1282		Liberty Avenue and 115th Street, Richmond Hill	1 1/2	52.4	40.02	1.9	do	Replaced N. Y. C. D. W. S. Well A 28A.
Q 1285		Rockaway Blvd. and 121st Street, So. Ozone Park	1 1/2	52.6	26.74	4.9	do	
Q 1284		Rockaway Blvd. and Lincoln Street, So. Ozone Park	1 1/2	45.1	35.84	8.2	do	
Q 1286		182d Street and 111th Avenue, So. Ozone Park	1 1/2	47.4	42.72	7.5	do	
Q 1286		144th Place near Jamaica Avenue, Jamaica	1 1/2	49.0	46.94	10.5	do	
Q 1287		Merrick Blvd. and 116th Avenue, St. Albans	2	27.1	25.53	12.8	do	
Q 1288		Merrick Avenue and 180th Street, St. Albans	1 1/2	23.5	36.30	13.5	do	
Q 1289		Springfield Blvd. and 110th Avenue, Queens Village	2	51.5	55.80	32.1	do	
Q 1290		Merrick Road and Springfield Blvd., Springfield	2	22.2	24.05	16.9	do	
Q 1292		Union Turnpike and 186th Street, Jamaica	1 1/2	44.0	67.71	27.5	do	
S 203		C. A. Gould	10	259.0	203.45	71.8	do	
S 1805	SU 12	N. Y. C. D. W. S.	1 1/2	15.4	21.69	16.4	do	
S 1805		Farmingdale Road and Albany Avenue, Amityville	2	22.9	57.19	45.0	do	Replaced N. Y. C. D. W. S. Well SU 57.

Well Number Owner's State	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Elevation Water Level (feet)	Date	Remarks
S 1806	SU 47	N. I. C. D. W. S.						
S 1807	SU 66	do						
S 1808	SU 75	do						
S 1809	SU 81	do						
S 1810	SU 86	do						
S 1812	SU 82	do						
S 1813	SU 83	do						
S 1814	SU 84	do						
S 1815	SU 85	do						
S 1816	SU 86	do						
S 1817	SU 87	do						
S 2454	SU 88	do						
S 2455	SU 89	do						
S 2456	SU 90	do						
S 2457	SU 91	do						
S 2458	SU 92	do						
S 2459	SU 93	do						
S 2460	SU 94	do						
S 2461	SU 95	do						
S 2462	SU 96	do						
S 2463	SU 97	do						
S 2464	SU 98	do						
S 2465	SU 99	do						
S 2466	SU 100	do						
S 2467	SU 101	do						
S 2468	SU 102	do						
S 2469	SU 103	do						
S 2470	SU 104	do						
S 2471	SU 105	do						
S 2472	SU 106	do						
S 2473	SU 107	do						
S 2474	SU 108	do						
S 2475	SU 109	do						
S 2476	SU 110	do						
S 2477	SU 111	do						
S 2478	SU 112	do						
S 2479	SU 113	do						
S 2480	SU 114	do						
S 2481	SU 115	do						
S 2482	SU 116	do						
S 2483	SU 117	do						
S 2484	SU 118	do						
S 2485	SU 119	do						
S 2486	SU 120	do						
S 2487	SU 121	do						
S 2488	SU 122	do						
S 2489	SU 123	do						
S 2490	SU 124	do						
S 2491	SU 125	do						
S 2492	SU 126	do						
S 2493	SU 127	do						
S 2494	SU 128	do						
S 2495	SU 129	do						
S 2496	SU 130	do						
S 2497	SU 131	do						
S 2498	SU 132	do						
S 2499	SU 133	do						
S 2500	SU 134	do						
S 2501	SU 135	do						
S 2502	SU 136	do						
S 2503	SU 137	do						
S 2504	SU 138	do						
S 2505	SU 139	do						
S 2506	SU 140	do						
S 2507	SU 141	do						
S 2508	SU 142	do						
S 2509	SU 143	do						
S 2510	SU 144	do						
S 2511	SU 145	do						
S 2512	SU 146	do						
S 2513	SU 147	do						
S 2514	SU 148	do						
S 2515	SU 149	do						
S 2516	SU 150	do						
S 2517	SU 151	do						
S 2518	SU 152	do						
S 2519	SU 153	do						
S 2520	SU 154	do						
S 2521	SU 155	do						
S 2522	SU 156	do						
S 2523	SU 157	do						
S 2524	SU 158	do						
S 2525	SU 159	do						
S 2526	SU 160	do						
S 2527	SU 161	do						
S 2528	SU 162	do						
S 2529	SU 163	do						
S 2530	SU 164	do						
S 2531	SU 165	do						
S 2532	SU 166	do						
S 2533	SU 167	do						
S 2534	SU 168	do						
S 2535	SU 169	do						
S 2536	SU 170	do						
S 2537	SU 171	do						
S 2538	SU 172	do						
S 2539	SU 173	do						
S 2540	SU 174	do						
S 2541	SU 175	do						
S 2542	SU 176	do						
S 2543	SU 177	do						
S 2544	SU 178	do						
S 2545	SU 179	do						
S 2546	SU 180	do						
S 2547	SU 181	do						
S 2548	SU 182	do						
S 2549	SU 183	do						
S 2550	SU 184	do						
S 2551	SU 185	do						
S 2552	SU 186	do						
S 2553	SU 187	do						
S 2554	SU 188	do						
S 2555	SU 189	do						
S 2556	SU 190	do						
S 2557	SU 191	do						
S 2558	SU 192	do						
S 2559	SU 193	do						
S 2560	SU 194	do						
S 2561	SU 195	do						
S 2562	SU 196	do						
S 2563	SU 197	do						
S 2564	SU 198	do						
S 2565	SU 199	do						
S 2566	SU 200	do						
S 2567	SU 201	do						
S 2568	SU 202	do						
S 2569	SU 203	do						
S 2570	SU 204	do						
S 2571	SU 205	do						
S 2572	SU 206	do						
S 2573	SU 207	do						
S 2574	SU 208	do						
S 2575	SU 209	do						
S 2576	SU 210	do						
S 2577	SU 211	do						
S 2578	SU 212	do						
S 2579	SU 213	do						
S 2580	SU 214	do						
S 2581	SU 215	do						
S 2582	SU 216	do						
S 2583	SU 217	do						
S 2584	SU 218	do						
S 2585	SU 219	do						
S 2586	SU 220	do						
S 2587	SU 221	do						
S 2588	SU 222	do						
S 2589	SU 223	do						
S 2590	SU 224	do						
S 2591	SU 225	do						
S 2592	SU 226	do						
S 2593	SU 227	do						
S 2594	SU 228	do						
S 2595	SU 229	do						
S 2596	SU 230	do						
S 2597	SU 231	do						
S 2598	SU 232	do						
S 2599	SU 233	do						
S 2600	SU 234	do						
S 2601	SU 235	do						
S 2602	SU 236	do						
S 2603	SU 237	do						
S 2604	SU 238	do						
S 2605	SU 239	do						
S 2606	SU 240	do						
S 2607	SU 241	do						
S 2608	SU 242	do						
S 2609	SU 243	do						
S 2610	SU 244	do						
S 2611	SU 245	do						
S 2612	SU 246	do						
S 2613	SU 247	do						
S 2614	SU 248	do						
S 2615	SU 249	do						
S 2616	SU 250	do						
S 2617	SU 251	do						
S 2618	SU 252	do						
S 2619	SU 253	do						
S 2620	SU 254	do						
S 2621	SU 255	do						
S 2622	SU 256	do						
S 2623	SU 257	do						
S 2624	SU 258	do						
S 2625	SU 259	do						
S 2626	SU 260	do						
S 2627	SU 261	do						
S 2628	SU 262	do						
S 2629	SU 263	do						
S 2630	SU 264	do						
S 2631	SU 265	do						
S 2632	SU 266	do						
S 2633	SU 267	do						
S 2634	SU 268	do						
S 2635	SU 269	do						
S 2636	SU 270	do						
S 2637	SU 271	do						
S 2638	SU 272	do						
S 2639	SU 273	do						
S 2640	SU 274	do						
S 2641	SU 275	do						
S 2642	SU 276	do						
S 2643	SU 277	do						
S 2644	SU 278	do						
S 2645	SU 279	do						
S 2646	SU 280	do						
S 2647	SU 281	do						
S 2648	SU 282	do						
S 2649	SU 283	do						
S 2650	SU 284	do						
S 2651	SU 285	do						
S 2652	SU 286	do						
S 2653	SU 287	do						
S 2654	SU 288	do						
S 2655	SU 289	do						
S 2656	SU 290	do						
S 2657	SU 291	do						
S 2658	SU 292	do						
S 2659	SU 293	do						
S 2660	SU 294	do						
S 2661	SU 295	do						
S 2								

Well Number State	Owner	Location	Diameter (inches)	Depth (feet)	Elevation of top of casing (feet)	Water Level Elevation (feet)	Date	Remarks
S 5545	150	N. Y. C. B. M. S.						
S 5727	129	Lincoln Ave., north of Church Street, Holbrook	2	46.0	56.56	56.7	May 29, 1945	
S 5728	126	Church St. near Lincoln Avenue, Sayville	2	42.0	40.06	52.0	June 29, 1944	
S 5729	204	Near Montauk Bay, and Taylor Ave., Hagerman	2	46.9	48.11	21.6	June 26, 1944	
S 5780	207	Dunton and Barton Avenues, Hagerman	2	39.6	56.59	28.8	Sept. 10, 1945	
S 5781	244	Dunton Ave. and So. Haven Rd., Plainfield	2	57.2	80.45	55.4	June 26, 1944	
S 5782	259	Taylor Ave. extension near Montauk Bay, Hagerman	2	44.2	52.02	24.5	do	
S 5783	487	Mt. Sinai Rd. near Port Jefferson Rd., Coram	2	76.4	109.68	52.5	June 27, 1944	
S 5785	1214	Lincoln Ave. south of Church Street, Sayville	2	47.2	56.79	17.9	June 29, 1944	
S 5786		Old Town Rd., near Dave Road, Selden	2	54.9	115.08	66.8	June 27, 1944	
S 5787		Lincoln Ave. and Schmidt St., Holbrook	1 1/2	57.9	96.25	44.4	June 29, 1944	
S 5788		Holbrook Rd., south of Jericho Turnpike, New Village	1 1/2	64.0	110.54	56.5	June 27, 1944	
S 5789		Orchard Rd. north of Jericho Turnpike, New Village	1 1/2	68.6	114.59	56.7	June 30, 1944	
S 5806		Lincoln Ave. near Church Street, Sayville	1 1/2	80.5	50.82	28.5	June 29, 1944	Replaced N. Y. C. B. M. S. Well 128.
S 5809		Upper Sheep Pasture Rd. Setauket Station	2	114.0	99.65	57.5	June 26, 1944	
S 5870		Mt. Sinai Rd. near Middle Country Rd., Coram	2	44.0	84.57	35.2	June 27, 1944	
S 5871		Mill Pond Rd. near Middle Country Rd., Coram	2	45.8	88.11	54.5	June 25, 1944	
S 5855		Five Rd. west of Ballport Rd., Plainfield	2	91.5	128.64	46.8	do	
S 5856		Pond Rd. near Horseblock Rd., Setauket Station	1 1/2	78.0	122.45	53.1	June 27, 1944	
S 5856		Millers Place and Yaphank Rd., Millers Place	1 1/2	124.4	145.47	51.7	do	

L. I. R. R. = Long Island Railroad
 N. C. D. P. W. = Nassau County Department of Public Works
 N. Y. C. B. M. S. = City of New York, Board of Water Supply
 N. Y. C. D. W. S. = City of New York, Department Water Supply, Gas and Electricity
 N. Y. S. D. H. = New York State Division of Highways
 N. Y. W. S. C. = New York Water Service Corporation
 U. S. G. S. = U. S. Geological Survey
 Y. M. C. A. = Young Men's Christian Association